

ADDENDUM NO. 1

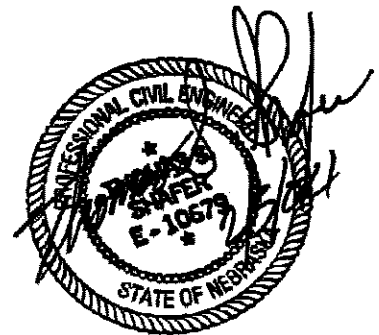
ARTERIAL REHABILITATION PROJECT 701749
SPEC. NO. 04-042
SOUTH STREET FROM 17TH TO 27TH STREET

TO ALL PROSPECTIVE BIDDERS:

1. Please insert the attached Special Provisions for this project.

NOTE: Bidders are instructed to sign and fax this page of Addendum No. 1 back to the City of Lincoln Engineering Services, attention Mary Lowe at fax number 402-441-6576, as evidence that this Addendum No. 1 has been received. Failure to do so could result in rejection of your bid.

Company/Contact Person



**SPECIAL PROVISIONS
FOR
ARTERIAL REHABILITATION
PROJECT NO. 701749**

Except as specifically modified by these Special Provisions, the Standard Specifications for Municipal Construction for the City of Lincoln shall apply to all work on this project.

I SUBLETTING OR ASSIGNING THE CONTRACT:

The following Special Provisions shall be considered in addition to Section VII, Part M, of the General Conditions of the 1999 City Standard Specifications.

The Contractor shall perform with his own organization contract work amounting to not less than 50 percent of the total contract amount.

No portion of the contract shall be subcontracted, assigned, or otherwise disposed of except with the written consent of the City Engineer. Requests for permission to sublet, assign or otherwise dispose of any portion of the contract shall be in writing and accompanied by a showing that the organization which will perform the work is particularly experienced and equipped for such work. The Contractor shall give assurance that the minimum wage for labor as stated in his proposal shall apply to labor performed on all work subcontracted, assigned or otherwise disposed of in any way. Consent to subcontract, assign or otherwise dispose of any portion of the contract shall not be construed to relieve the Contractor of any responsibility for the fulfillment of the contract.

In the event the Contractor permits work under this contract to be performed by forces other than by his own organization without obtaining prior written consent of the Engineer, such work shall be considered unauthorized and will not be paid for under the provisions of the contract.

II TREE PROTECTION:

The Contractor is to protect all trees that are not required to be removed in this project. Any form of protection chosen by the Contractor, such as fences, ropes, etc., shall be furnished, erected, and maintained by the Contractor. Any trees that appear to have significant root damage caused by the excavation necessary to widen the street or any tree that needs trimmed in or from the public right-of-way, shall be coordinated with the Project Manager or his representative who shall contact the City Arborist to verify any necessary actions in saving, trimming, or removing the damaged tree.

III COMPLETION DATE, INCENTIVES AND LIQUIDATED DAMAGES:

Incentives and liquidated damages are applicable to certain portions of the contract as determined by the Engineer. The locations, the number of days allotted and the completion date these incentives and liquidated damages are listed in the Traffic Control (Section V) of these Special Provisions.

Calendar days as defined in the City of Lincoln Standard Specifications shall be used on this project to determine the incentives or liquidated damages, at each individual location, as well as, the final acceptance of the overall project.

Allotted calendar days at each location shall commence on the day through traffic is detoured and shall continue until through traffic has been restored, and reconstruction substantially completed, in accordance with Chapter 1.00 Article 1.07, City of Lincoln Standard Specifications.

Section VIII, Part H of the General Conditions of the 1999 City Standard Specifications is amended to eliminate the schedule used to compute liquidated damages. Liquidated damages for the individual locations and the overall contract shall be \$1,000.00 per day and will be deducted from the Contractor's final estimate if the work is not substantially complete prior to:

- 1) The completion date specified for each location
or
- 2) The termination of all time extensions granted by the City

All the work in this contract shall be complete no later than August 25, 2003

IV POWER GRINDING:

- A. **Street Condition** - The power grinding of the center portion of the street shall not take place until all of the concrete work is complete on that section.

Material generated by power grinding shall be disposed of at the City Maintenance yard at 32nd & Baldwin Avenue, 901 North 6th Street, or 56th & London Road, as directed by the Engineer.

- B. **Power Grinding Equipment** - The power grinder shall have a self-loader with a minimum cutting width of six feet (6). The Engineer shall approve all the equipment to be used. Bid prices called for in the proposal for such equipment to be fully operational shall include the operator, fuel, oil, tools, and all parts necessary for complete operation. The use of this equipment shall be paid for per hour.

V NONWOVEN PAVEMENT OVERLAY FABRIC:

- A. Description** - This work shall consist of the application of an asphalt sealant and the placement of a non-woven pavement overlay fabric over the entire prepared surface of the pavement to be resurfaced with asphalt, as directed by the Engineer.
- B. Materials** - The asphalt sealant shall be asphaltic cement.

The overlay fabric shall be a needle-punched, non-woven polypropylene fabric and shall conform to the following requirements.

Property	Typical	Minimum
Weight, Oz./Sq. Yd.	4.3	3.8
Tensile Strength, Lbs.	115	90
Elongation at Break %	60	55
Mullen Burst Strength, psi	220	200
Asphalt Retention, Gals./Sq. Yd.	---	0.20

The non-woven overlay fabric material shall be accepted on the basis of the manufacturer's certification, which shall be supplied by the contractor prior to installation.

- C. Construction** - The asphalt sealant and fabric shall be placed at temperatures of 50°F or above. The pavement surface on which the sealant fabric is to be placed shall be dry and free of dirt, debris and other foreign matter. Joint and crack openings 1/8" and larger shall be filled with a suitable material as directed by the Engineer. The asphalt sealant shall be applied with distributor equipment supplied by the Contractor at a rate of 0.25 to 0.30 gallons per square yard. The width of the asphalt sealant application shall be fabric width plus 2-6 inches. The temperature of the asphalt sealant shall not be less than 290°F at the time of application to ensure a uniform spray pattern. No drilling or skipping will be permitted. Asphalt drools or spills shall be cleaned from the pavement surface to avoid flushing and possible fabric movement at these asphalt rich areas.

Fabric laydown equipment shall be used for placement of the fabric. Overlap of fabric joints shall be 1-3 inches. Immediately after placement, the fabric shall be embedded into the asphalt cement sealant with pneumatic roller, unless otherwise directed by the Engineer. The construction of the asphaltic concrete overlay shall follow closely the placement of the fabric. In the event the sealant bleeds through the fabric before the overlay is placed, the Contractor shall be required to spread a thin layer of sand or asphaltic concrete over the affected areas in order to prevent the fabric from being picked up by construction equipment. The application of tack coat will not be required on the fabric prior to the placement

of the asphaltic concrete unless a delay in the placement of the overlay results in the fabric becoming dry or dirty.

- D. **Measurement and Payment** - The placement of the non-woven pavement overlay fabric shall be measured and paid for at the contract unit price per square yard for the item, "NON-WOVEN PAVEMENT OVERLAY FABRIC, IN PLACE". This price shall be full compensation for cleaning and preparing the pavement surface and filling joint and crack openings as required, including furnishing material for this purpose; for furnishing, heating and applying the asphalt sealant; for assisting the manufacturer's representative in the placement of the fabric and rolling the fabric; for furnishing and applying material for blotting the surface of the fabric as required; and for all equipment, labor, tools, and incidentals required to complete the work.

VI ASPHALTIC CONCRETE SURFACING:

Shall correspond to Chapters 5 and 12 of the new Standard Specifications for Municipal Construction. See attachments.

VII PORTLAND CEMENT CONCRETE:

Shall correspond to Chapter 11 of the new Standard Specifications for Municipal Construction. See attachments.

VIII REMOVAL AND REPLACEMENT ITEMS:

Removal items are not necessarily of the same size and shape as the new construction: removal shall include whatever materials occupy the space which the new construction is intended to occupy. All removal and replacement items shall be paid for under the units identified in the bidding schedule and paid for at the unit price bid for each appropriate item. Such payment shall compensation for removal of the existing items and their disposal; preparation of new subgrades; constructing the replacement items; materials, equipment, tools, labor and incidentals necessary to complete the removal and replacement of each item called for in the bidding schedule.

IX CONCRETE BASE REPAIR:

Chapter 11 - Portland Cement Concrete is hereby revised to stipulate that no fly ash shall be added to any mix.

Description - This work shall consist of removing and replacing pavement in accordance with the details shown in the plans and at locations designated by the Engineer.

Concrete Base Repair - All areas of concrete base failure shall be replaced with L3500 Concrete, as directed by the Engineer. When pouring back the new concrete base, the

Contractor shall be required to use a vibrating screed that shall operate over the entire width of the base and shall achieve uniform consolidation. All small or irregular areas shall be vibrated by methods approved by the Engineer.

Concrete base repair shall be measured for payment in square yards, complete, in place and accepted by the Engineer. The quantity of completed and accepted work shall be paid for at the contract unit price per square yard for the item "REMOVE AND REPLACE CONCRETE BASE, COMPLETE, L3500". This price shall be full compensation for furnishing, preparing, transporting, delivering and placing all materials; all curing, removing and disposing of old pavement and steel as specified herein; and for all labor, equipment, tools, and incidentals necessary to complete the work.

X *CURB REMOVAL AND REPLACEMENT:*

Chapter 11 - Portland Cement Concrete is hereby revised to stipulate that no fly ash shall be added to any mix.

The replacement of curb shall be accomplished with a slip-form curb machine side mount only, using string line as grade, unless permission is obtained from the Engineer to hand form the curb.

Removals shall be disposed of at a site approved by the Project Manager. The curb removal and replacement shall be done prior to laying the asphalt. The clean-up of the streets to their original condition and the park spacing shall be subsidiary to the price for removal and replacement. All earth fill shall be select material and furnished by the Contractor as subsidiary to the items for which direct payment is made. Any area disturbed beyond three feet behind the existing curb and gutter or widen curb area shall be sodded at the Contractor's expense.

Concrete curb shall be measured for payment by the lineal foot, complete, in place and accepted by the Engineer. The quantity of completed and accepted work shall be paid for at the contract unit price per linear foot for the item "REMOVE AND REPLACE CONCRETE CURB, COMPLETE". This price shall be full compensation for furnishing, preparing, transporting, delivering and placing all materials; all curing, removing and disposing of old curb as specified herein; and for all labor, equipment, tools and incidentals necessary to complete the work.

XI *CONCRETE DRIVEWAY, WALK, AND MEDIAN SURFACING REMOVAL & REPLACEMENT:*

Chapter 11 - Portland Cement Concrete is hereby revised to stipulate that no fly ash shall be added to any mix.

Removals shall be disposed of at a site approved by the Project Manager.

One-inch expansion joints shall be placed at all locations where the walk or driveway or curb abut.

Concrete driveway, walk and median repair shall be measured for payment in square foot complete, in place and accepted by the Engineer. The quantity of completed and accepted work shall be paid for at the contract unit price per square foot for the item "REMOVE AND REPLACE CONCRETE WALK, DRIVEWAY, AND MEDIAN SURFACING, COMPLETE L3500". This price shall be full compensation for furnishing, preparing, transporting, delivering, and placing all materials; all curing, removing, and disposing of old walk, driveway and median surfacing as specified herein; and for all labor, equipment, tools, and incidentals necessary to complete the work.

XII PORTLAND CEMENT CONCRETE PAVEMENT:

Chapter 11 - Portland Cement Concrete is hereby revised to stipulate that no fly ash shall be added to any mix.

- A. **Description** - This work shall consist of removing and replacing pavement of any material or thickness and replacing it with Portland Cement Concrete Pavement in accordance with the details shown in the plans and at locations designated by the Engineer. The work shall include removing and disposing of pavement; furnishing, placing, and curing concrete; sealing all joints; and repairing all damaged curb, median surfacing and walk.
- B. **Removal and Preparation of Repair Site** - The Engineer shall designate the sections to be removed.

Sections shall be removed to the lines designated by the Engineer, including reinforcement that interferes with the operations. The repair section shall be removed with minimum disturbance of the underlying foundation course and abutting surfacing. Damaged curb, walk, median surfacing and median curb shall be replaced as shown on the typical section of the plan.

If the slab or any of the above abutting surfaces is damaged by the Contractor's failure to use appropriate removal techniques, the surface shall be repaired at the Contractor's expense.

Any loosened foundation course material shall be removed and replaced with concrete. The foundation course shall be moistened by sprinkling prior to placing concrete. A form shall be used at the pavement edge to provide the same surface elevation and edge alignment as the existing pavement. The form shall be supported and braced in position in a manner that is approved by the Engineer.

- C. **Concrete** - L5500 or L3500
- D. **Opening to Traffic** - Repairs completed with L5500 Concrete may be opened to traffic at the end of the 24 hour curing period.

- E. **Measurement and Payment** - Concrete pavement, will be measured for payment by the square yard, complete, in place, and accepted by the Engineer.

The quantity of completed and accepted work, measured as provided herein, shall be paid for at the contract unit price per square yard for the item "REMOVE AND REPLACE CONCRETE PAVEMENT _____ THICK". This price shall be full compensation for furnishing, preparing, transporting, delivering and placing all materials; all jointing, all, curing and sealing; removing and disposing of old pavement and steel as specified herein; and for all labor, equipment, tools, and incidentals necessary to complete the work.

XIII STORM SEWER CONSTRUCTION:

The Contractor shall make all connections of new storm sewers to existing storm sewers as shown on the plans.

The Lincoln Standard Plans are hereby amended to reflect only a nine (9) lineal feet deduction for curb through the area of the inlets (Straight, Canted, or Radius).

Inlets shall be paid for at the contract unit prices per each for "72" STORM SEWER INLET, STRAIGHT, CANTED, OR RADIUS". This payment shall be full compensation for excavation, backfill, materials, equipment, tools, labor, and incidentals necessary to complete the work.

At various locations shown on the plans, the existing inlet tops shall be replaced with new inlet tops, including ring and cover. All new tops shall be paid at the unit price bid for "PRE-CAST" INLET TOP, IN PLACE". Such payments shall be for full compensation for removal of the existing items and their disposal.

XIV MANHOLE ADJUSTMENT - VALVE BOX

When adjusting manhole or valve boxes in streets the ring and cover shall be no lower than 3/8" below finish street elevation. If it is determined a manhole or valve box does not meet this requirement, the contractor, at his own expense, will be required to use the cities Typical Utility Adjustment Detail (See plan booklet for details).

XV SPRINKLER SYSTEM:

The Contractor shall locate, protect and repair at his expense any portion of a sprinkler system that is damaged by his work operations. No direct payment will be made for the above described work, as it shall be considered subsidiary to the items for which direct payment is made.

When sprinklers need to be relocated as a result of the work, it shall be approved by the Project Manager and paid as an 'extra work item'.

XVI MAILBOXES:

Remove and replacing mailboxes shall be considered subsidiary to items for which payments are made. Ornamental mailboxes shall remain in place and the curb shall be hand formed in the area of the ornamental mailbox.

XVII PUBLIC INFORMATIONAL SIGNS:

The Contractor shall pick up at the Department of Public Works Engineering Services Office and shall erect and maintain public information signs. The signs shall be erected and in place only during the time of construction. At the completion of construction, the signs shall be moved to the next construction site. The signs shall be picked up at the beginning of the contract and returned at the completion of the contract to a location designated by the Engineer. All necessary precautions shall be taken in the transportation and erection of the signs to protect them from damage other than normal wear. No direct payment will be made for the above work, it being considered subsidiary to the items for which direct payment is made.

The Contractor shall erect and maintain temporary "No Parking" signs, supplied by the City. No direct payment will be made for the above work, it is considered subsidiary to the items for which direct payment is made.

XVIII TRAFFIC PAVEMENT MARKING:

Section 13.00 TRAFFIC PAVEMENT MARKING of the City of Lincoln Standard Specifications for Municipal Construction is specifically modified as follows:

13.00 GENERAL:

All traffic pavement markings on asphalt shall be thermoplastic (molten) marking and all traffic markings on concrete shall be preformed plastic marking material.

13.02 B2 Approved Material:

Preformed plastic marking material shall be **3M Company Series 380** material.

1302 C2 Formula:

The pigments for the yellow thermoplastic material may contain lead and/or chromium. The yellow pigment for thermoplastic material applied to asphaltic concrete shall be double encapsulated lead chromate. The thermoplastic material must comply with the RCRA Federal Standard of 5 mg/L maximum lead content as determined by TCLP evaluation.

1302 C5a Physical Requirements of Material, Color Yellow:

The yellow pigment may contain lead.

XIX DUST CONTROL

A. Air Pollution Nuisances Prohibited

The emission or escape into the open air from any source or sources whatsoever of smoke, ashes, dust, dirt, grime, acids, fumes, gases, vapors, odors, or any other substances or combinations of substances, in such manner or in such amounts as to endanger or tend to endanger the health, comfort, safety, or welfare of the public, or is unreasonably offensive and objectionable to the public, or shall cause unreasonable injury or damage to property or interfere with the comfortable enjoyment of property or normal conduct of business, is hereby declared to be a public nuisance. It shall be unlawful for any person to cause, permit, or maintain any such public nuisance.

Nothing in any section of the Air Pollution Control Program shall in any manner be construed as authorizing or legalizing the creation or maintenance of a nuisance as described in this section of this Chapter. (Ord. 16509 § 16; November 15, 1993; prior Ord. 15550 § 15; May 14, 1990: P.C. 8.64.131: Ord. 11616 § 13; March 1, 1976).

A. Penalty

Any person who violates any of the provisions of this Chapter or who fails to perform any duty imposed by the same shall be guilty of a misdemeanor, and upon conviction thereof shall be punished by imprisonment in the county jail for a period of not to exceed six months or by a fine of not to exceed \$500.00 recoverable with costs, or both such fine and imprisonment. Each day that a violation continues shall constitute a separate and distinct offence and shall be punishable as such. In default of the payment of such fine and costs, the person or, if such person is a corporation, the officers of such corporation may be imprisoned in the county jail for a period of not more than sixty days and in addition thereto may be enjoined from continuing such violation. (Ord. 16509 § 16; November 15, 1993; prior Ord. 15550 § 15; May 14, 1990: P.C. 8.64.131: Ord. 11616 § 13; March 1, 1976).

Special Traffic Control Provisions

Project Number: 701-749

Project Description: 2004 Arterial Rehabilitation

Project Location: South St., 17th to 27th

Except as specifically modified by these Special Traffic Control Provisions, the Standard Specifications for Municipal Construction for the City of Lincoln shall apply to all work on this project.

The following Special Traffic Control Provisions are intended to allow the contractor to complete the work on this project while minimizing disruption to the motoring public and maximizing access to the affected properties.

- The pedestrian signal at 20th St. must remain in operation while Lincoln Public Schools are in session.

Incentives and Liquidated Damages

Project Number: 701-749

Project Description: 2004 Arterial Rehabilitation

Project Location: South St., 17th to 27th

The Contractor shall have until Aug. 25, 2004 to complete all work necessary to provide for safe and unrestricted public vehicular and pedestrian traffic on the full width of South Street including the items listed as follows:

- Installation of all pavement markings shall be complete and in accordance with the plans as required for final acceptance and determination of incentives and liquidated damages prior to opening any street segment to through traffic.
- From the commencement of work on this project the Contractors shall have a period of ninety (95) days to complete all items of work.
- Pavement and driveway removals within the project limits shall be scheduled so that individual residential driveways are not out of service for more than ten (10) days either by permanent replacement or temporary access. Temporary access to residential driveways will not be paid for directly but will be considered subsidiary to other pay items. If the Engineer determines that the Contractor is unable to meet this requirement, additional pavement removals may be suspended until this requirement can be met. No calendar day extensions will be approved based on delays caused by this requirement.

- ➔ The Contractor will make sure that the center of South St. is clean and accessible for the Lincoln Marathon on May 2nd 2004 and the Lincoln Corporate Run on June 6th 2004. This effort will not be paid for directly but will be considered subsidiary to other pay items.

The Contractor's failure to complete all work necessary to provide for safe and unrestricted public vehicular and pedestrian traffic on the full width of South Street within in the ninety five day work frame or after Aug. 25, 2004 shall result in liquidated damages of \$1,000.00 per calendar day

The Contractor's completion of the above-stipulated work prior to Aug. 25, 2004 shall result in providing the Contractor with incentive payments in the amount of \$1,000.00 per calendar day with a maximum incentive of \$5,000.00.

SPECIAL PROVISIONS FOR

Traffic Control

Except as specifically modified by these Special Provisions, the Standard Specifications for Municipal Construction for the city of Lincoln shall apply to all work on this project.

TRAFFIC CONTROL PROVISIONS:

General

The Contractor shall maintain traffic during construction and provide, install, maintain and when work is complete, remove all traffic control devices in accordance with these project guidelines, the Project Special Provisions, and the City of Lincoln Traffic Control Guidelines for Street Construction, Maintenance and Utility Operations. Traffic control shall conform to the ordinances and regulations of the City of Lincoln and the Manual on Uniform Traffic Control Devices for Streets and Highways, U.S. Department of Transportation, latest edition and revisions thereto (MUTCD). Failure of the Contractor to erect and maintain traffic protective devices shall be reason to suspend the work.

Scope

This work shall consist of furnishing and maintaining in place all barricades, warning signs, lights, and other safety devices required to protect the work, divert traffic, warn of open excavations, unfilled trenches, and other areas or conditions which might be hazardous or dangerous during daylight or darkness.

The Contractor shall strictly adhere to all time limits and other restrictions as specified. The Contractor shall utilize complete and proper traffic controls and traffic control devices during all operations. All traffic control and traffic control devices required for any operation shall be functional and in place prior to the commencement of that operation. Signs for temporary operations shall be removed during periods of inactivity. The Contractor is required to leave the project in a manner that will be safe to the traveling public and which will not impede motorists.

All traffic control devices shall be located according to and meet all requirements prescribed in the MUTCD. Failure of the Contractor to erect and maintain traffic protective devices shall be reason to temporarily suspend the work

All traffic and/or traffic control devices on the project shall be provided, located, maintained and/or controlled as specified in the Manual on Uniform Traffic Control Devices (MUTCD) and the City of Lincoln Traffic Control Guidelines for Street Construction, Maintenance and Utility Operations. All traffic control devices shall meet all requirements prescribed in the MUTCD.

The Contractor shall comply with all applicable Federal, State, and local laws, ordinances, and regulations governing safety, health, and sanitation, and shall provide all safeguards, safety devices, and protective equipment, and shall take any other needed actions, on his own responsibility that are reasonably necessary to protect the life and health of employees on the job and the safety of the public, and to protect property in connection with the performance of the work covered by the contract.

Traffic Control Plan (TCP)

Traffic Control Plan

This plan may include traffic control devices in conformance with the City of Lincoln Traffic Control Guidelines for Street Construction, Maintenance and Utility Operations or the Manual on Uniform Traffic Control Devices (MUTCD), but it must meet or exceed the standards presented in the City of Lincoln Traffic Control Guidelines.

The Traffic Control Plan (TCP) shall include either:

- A. A detailed drawing(s), showing all traffic control devices.
- B. A reference to a standard drawing found in the City of Lincoln Traffic Control Guidelines for Street Construction, Maintenance and Utility Operations or the Manual on Uniform Traffic Control Devices (MUTCD), but it must meet or exceed the standards presented in the City of Lincoln Traffic Control Guidelines, provided the referenced standard drawing properly depicts the work area and completely addresses the needed traffic control.

The TCP will also consider, but will not necessarily be limited to, the following items:

1. Signing, Barricades, Drums, Cones, Dynamic Message Boards, and/or any other traffic control devices.
2. Worker protection/safety.
3. Minimizing delays and economic impacts to traffic.
4. Construction scheduling and hours of work.
5. Flagging.
6. Methods and devices for delineation and channelization.
7. Placement and design of barriers and barricades.
8. Storage of equipment and materials.
9. Removal of construction debris.
10. Length of time for lane closures.
11. Access for emergency vehicles.
12. Clear roadside recovery areas.
13. Movement of construction equipment.
14. Length of project under construction at any one time.
15. Methods of minimizing construction time consistent with safety.

16. Speed limits and enforcement.
17. Surveillance and inspection.
18. Modification of the above-noted items as well as any other related ones under conditions of darkness or inclement weather.
19. Congestion/Incident management techniques.

Preparation

A complete TCP shall be prepared by a Traffic Control Supervisor.

Submission

The Contractor shall submit a TCP in writing and/or drawing form for the review by the Engineer one (1) week prior to proposed work beginning. No phase of construction shall commence until the TCP has been reviewed. The approved TCP shall not be revised without prior review of the Engineer. TCP revisions shall be submitted a minimum of seventy-two (72) hours (three City business days) prior to implementation.

Format

TCPs shall include detailed signing, barricading, and traffic detouring information for each phase or stage of construction including as a minimum: type and number of devices, working hours, number and location of flaggers, and time restrictions, if any.

Availability

Copies of the reviewed TCPs shall be available on-site at all times; the Contractor shall provide copies to the Traffic Engineer, Project Manager, and Project Observer.

Beginning Work and Work Limits

The work shall not begin until the approvals have been given and the approved TCP is on the project site. Once the project has begun, the Traffic Control Supervisor must ensure that the plan is followed throughout the project.

The Contractor shall not exceed the work limits specified for each phase or stage of construction, unless approval to do so is granted by the Engineer. Any work beyond the limits of public right-of-way and/or easements shall be approved in writing by the property owner and reviewed by the Engineer and the City Traffic Engineering Division.

Should the Contractor fail to maintain the work within the specified limits, the Engineer or the City Traffic Engineering Division shall direct that all operations be suspended until the work is returned to the specified limits. Any costs incurred by the Contractor due to such suspension shall be at the Contractor's expense and no additional compensation or time extensions shall be made therefore.

Notification

The Contractor shall provide any changes or updated information to the Engineer on a daily basis.

Traffic Control Supervisor

Traffic Control Supervisor

Before work begins on a project, the TCP shall designate in writing a qualified person to be responsible for the traffic control on the project. This person shall be one who has been trained in accordance with traffic control principles and shall be known as the Traffic Control Supervisor. The TCP shall designate a Traffic Control Supervisor who shall perform the Traffic Control Management and shall be responsible for maintaining all Traffic Control Devices in compliance with the TCP.

Working Hours and Emergency Contact

The Traffic Control Supervisor shall be available on a twenty-four (24) hour per day basis. The Traffic Control Supervisor, or his representative as approved by the City, will be available on every working day and upon the request of the Engineer.

The contractor shall maintain a twenty-four (24) hour, seven (7) days a week (including weekends and holidays) emergency service to remove, install, relocate, and maintain warning devices. The permittee shall furnish to the City the name and telephone number of the Traffic Control Supervisor responsible for emergency service.

In the event the Traffic Control Supervisor does not respond within two (2) hours, or the City deems it necessary to call out other forces to accomplish emergency services, the contractor will be held responsible for the cost of such emergency services, without reimbursement.

Duties

The Traffic Control Supervisor duties shall include, but not be limited to:

1. Preparing, revising, and submitting the Traffic Control Plan as required.
2. Direct supervision of project flaggers.
3. Coordinating all Traffic Control operations, including those of permittee or permittee's contractor, subcontractors and/or suppliers.
4. Coordinating project activities with appropriate police and fire control agencies.
5. Maintaining a project Traffic Control diary which shall become a part of the project records.
6. Inspect all traffic control items prior to installation to insure that the materials meet the plan and specification requirements.
7. Inspect the installation of the items and make routine inspections, (at least twice each workday, each calendar day is preferable), of the traffic control devices to determine that they are being properly maintained and cleaned, if necessary. (By the Traffic Control Supervisor or his approved representative).
8. Insuring that Traffic Control Devices are functioning as required including periodic nighttime inspections
9. To assure that proper maintenance is being performed on the traffic control devices. During these inspections, it is important that the contractor has covered or removed all traffic control devices that are no longer needed or are no longer applicable. More frequent inspections may be required during or following periods of inclement

- weather; if vandalism, etc. should become a problem; or at other times when more frequent inspections are warranted.
10. Will be responsible for advising the permittee or permittee's contractor of all deficiencies.
 11. Shall report to the Engineer or the designated representative, in writing, all known traffic accidents which occur on a project. The Traffic Control Supervisor shall, to the best of his/her ability, analyze the circumstances involved in the accident and advise the Engineer or the designated representative of recommended changes (if any) in the Traffic Control Plan. An effort will be made by the Engineer or the designated representative to obtain accident reports prepared by law enforcement officers having jurisdiction in the project area. This data will be utilized in evaluating the Traffic Control Plan.
 12. Overseeing all requirements covered by the Traffic Control Plans which contribute to the convenience, safety and orderly movement of traffic.
 13. Keeping Engineer informed of the apparent adequacy and effectiveness of the traffic control items on the project.

Inspection of Traffic Control

Routine inspections of traffic control elements must be made to ensure acceptable levels of operation. Inspections will be performed by trained personnel and should be accomplished at a frequency corresponding to the magnitude of the:

1. utility activity,
2. traffic volumes, and
3. other contributing factors.

When the contractor fails to follow the approved traffic control plan, the Engineer or the designated representative will suspend the work until the required traffic control is in place.

General Construction Requirements

The Contractor shall take all necessary precautions for the protection of the work and the safety of the public. The initial placement, replacement, and removal of the lane dividers and other traffic control devices shall be done with extreme care and consideration for the traveling public. The Contractor shall install, maintain, and remove all traffic control devices in accordance with the details of and at the locations shown in the plans. The Contractor shall be alert at all times to any and all deficiencies in the placement and maintenance of any traffic control devices and shall take immediate action to correct any deficiencies.

Existing Traffic Control Devices

Prior to commencing work in the vicinity of any existing Traffic Control Devices, the Contractor shall coordinate with the City Traffic Engineering Division in the removal of devices which need to be removed or relocated to accommodate the work. The Contractor shall store all devices in a safe and secure manner throughout the period of work and assume responsibility for temporary devices

if necessary. Existing traffic control devices shall not be removed without the Engineer's approval. The Contractor shall remove conflicting permanent (not "temporary") pavement markings as shown in the plans or as required by the Engineer.

Upon completion of the work in the vicinity of the previously removed Traffic Control Devices, the Contractor shall reinstall the devices as directed by the City Traffic Engineering Division. Any Traffic Control Devices damaged during removal, relocation storage, or reinstallation shall be repaired or replaced by the Contractor at their expense.

The removal relocations, storage, and reinstallation of existing devices shall not be paid for separately, but shall be considered as incidental to the project.

Spare Equipment and parts

The Contractor shall maintain a stock of spare lights, signs, devices, and repair parts at the project site for immediate emergency replacement or repairs.

Visibility

The Contractor shall mow or trim vegetation to insure that the complete visibility of signs, barricades, and other warning devices is maintained at all times.

All lights shall be turned on from sunset to sunrise or when visibility is less than 1/4 mile. Lenses shall be kept clean, and light intensity shall be such that the device is visible for at least 1,000 feet in all conditions.

Flaggers

The City Traffic Engineering Division requires flaggers for traffic direction.

Traffic movements through temporary lane closures on roads with two way traffic shall be controlled by flaggers stationed at each end of the work zone. In situations where sight distance is limited, the Contractor shall provide additional means of controlling traffic, including, but not limited to, two-way radios, pilot vehicles, or additional flaggers. Flaggers shall be competent personnel, adequately trained in flagging procedures, and furnished with proper safety devices and equipment, including, but not limited to, safety vests and stop/slow paddles.

Flagging

It shall be the responsibility of the Contractor to furnish flagger(s) to direct traffic when construction activity occurs on or adjacent to a surface being used by the traveling public.

The flagger(s) shall be properly attired with vest and head gear. They shall be provided properly installed advance warning signs, and they shall be otherwise equipped in accordance with the requirements of the plans and specifications.

Flaggers shall position themselves appropriately and according to accepted flagging procedures.

Access to Adjacent Properties

The Contractor shall notify all affected residents and/or property owners a minimum of 48 hours prior to restricting normal access from public streets to adjacent properties. The Contractor shall inform each resident and/or property owner of the nature of the access restriction, the approximate duration of the restriction, and the best alternate access route for that particular property. Any closure of access to or from adjacent property shall be submitted to the Engineer and reviewed prior to implementation.

Re-Opening to Traffic

Before reopening any portion of the public streets to vehicular traffic, the Contractor shall restore the pavement, shall reset all signs, and shall restore all pavement markings. If necessary, a temporary asphalt concrete surface and temporary pavement markings shall be installed by the Contractor at his expense. Any signs damaged as a result of the Contractor's work shall be repaired or replaced to the requirements of the Engineer; said repair or replacement shall be at the Contractor's expense.

Payment***Lump Sum Bid Item***

Payment for Traffic Control and Work Zone Safety items shall be made under the lump sum pay item for "Traffic Control for Construction." When Traffic Control is shown as a Lump Sum item in the bid schedule, it shall be the responsibility of the Contractor to determine the Traffic Control needs for the project, including all devices and personnel, and to develop the bid amount accordingly. This payment includes set-up, maintenance, removal, and any traffic control devices. Payment shall be made as a percentage of the Traffic Control Lump Sum amount equal to the percent-complete-to-date of the balance of the total contract amount less any previous payments for Traffic Control. In no case shall the total amount paid for Traffic Control exceed the Lump Sum shown in the bid schedule. Payment is full compensation for all work prescribed in this Section.

Non-Compliance

Failure to comply with any of the requirements for safety and traffic control of this contract shall result in suspension of work and/or Payment Reduction for Non-Compliance.

1. The Contractor may be given notice, either written or verbal, of failure to install, replace, remove, or maintain a traffic control device.
2. Upon notification by the Engineer, the Contractor shall respond to any site within 2 hours and take immediate steps to correct the deficiency.
3. If corrective action is not taken by the Contractor within 2 hours of the initial notice, the Engineer shall make no payment for any traffic control devices for that day.
4. If corrective action is not taken within 2 hours, a written notice of action to be taken shall be given to the Contractor or person designated for work zone traffic control.
5. Failure to install, replace, remove, or maintain a device within 4 hours of the initial notice may result in no payment being made for any traffic protective devices on the project for that day and on subsequent days until the requested installation, replacement, removal, or

maintenance is performed. The Engineer may also suspend all other work until the problem is corrected.

The Engineer may elect at any time to correct a traffic control deficiency and bill the Contractor for all costs necessary to correct the problem.

The Contractor shall immediately notify the Engineer of any hazard or changed roadway condition that is not identified in the plans.

Any action on the part of the Contractor which results in non-compliance with the reviewed TCP and/or the requirements of this section may be cause for reduction in payment. Non-compliance shall include failure to have the TCP on the job site at all times when in effect and failure to be able to produce the TCP upon request by any employee of the Public Works and Utilities Department.

The payment shall be reduced by the following method:

Lump Sum Bid Item

The payment shall be reduced by an amount equal to the Traffic Control Lump Sum amount divided by the total number of contract days as stated in the bid documents multiplied by the number of days when the Contractor is not in compliance with the reviewed TCP and/or the requirements of this section. In no case shall the amount of the reduction in payment per day be less than one (1) percent of the total contract amount for Traffic Control for Construction.

Variable Message Signs

The Contractor will be required to furnish, install and maintain Variable Message Signs to alert traffic to the construction and traffic configuration during various construction phases of the project. The variable message signs will be placed a minimum of 5 days in advance to the disruption or shifting of traffic or as directed by the Engineer. The signs shall be left up for at least 3 days once construction has begun to inform the public of the current traffic configurations as directed by the Engineer. Sign placement shall be shown on the Traffic Control Plans for each phase of the construction and must be approved by the Engineer. All messages shown on the signs shall be as specified by the Engineer. It is anticipated that a maximum of two variable message signs will be required for this Arterial Rehabilitation Project.

Payment for the Variable Message Sign shall be a fixed cost and paid for at the contract unit price of seventy-five dollars (\$75.00) per day for the pay item "Variable Message Sign". Such payment shall be full compensation for furnishing, placement, maintenance, removal and all other incidentals required to provide fully operational Variable Message Signs.

